20

## **CLAIMS**

- Thermoplastic elastomer composition, comprising an thermoplastic polyolefin and an dynamically vulcanized elastomer comprising monomer units of ethylene, an α-olefin and optionally one or more non-conjugated polyenes and oil, having an oil/elastomer ratio of at least 2/1, having a content of thermoplastic polyolefin of less than 10 wt.% relative to the total weight of the thermoplastic elastomer composition, granulate of the composition having the capability of flowing out of a cylinder, held in vertical position, within 120 seconds, after being kept in that cylinder under a pressure of 465 kg/m2, at a temperature of 50 °C, for a period of 1 hour, that cylinder having an internal diameter of 95.3 millimeter (mm) and a length of 356 mm and being filled for a length of between 326 and 338 mm.
- Thermoplastic elastomer composition according to claim 1, wherein the
  granulate is kept in the cylinder for 24 hours.
  - 3. Thermoplastic elastomer composition according to claim 1, wherein the granulate is kept in the cylinder for 48 hours.
  - 4. Thermoplastic elastomer composition according to any one of claims 1-3, wherein the granulate is capable of flowing out of the cylinder within 60 seconds.
  - Thermoplastic elastomer composition according to any one of claims 1-3, wherein the granulate is capable of flowing out of the cylinder within 30 seconds.
- 6. Thermoplastic elastomer composition according to any one of claims 1-3, wherein the granulate is capable of flowing out of the cylinder within 15 seconds.
  - 7. Thermoplastic elastomer composition according to any one of claims 1 6, wherein the thermoplastic polyolefin is polypropylene.
- 8. Thermoplastic elastomer composition according to any one of claims 1-7, wherein the thermoplastic elastomer composition has a degree of curing between 80 and 98 %.
  - 9. Thermoplastic elastomer composition according to any one of claims 1-8, wherein the thermoplastic elastomer composition has a surface smoothness Ra of less than 10 microns.

WO 2005/010094 PCT/NL2004/000542 - 12 -

- Thermoplastic elastomer composition according to any one of claims 1-9, wherein the thermoplastic elastomer composition has a surface smoothness Ra of less than 5 microns.
- 11. Thermoplastic elastomer composition according to any one of claims 1-9, wherein the thermoplastic elastomer has a hardness below 50 shore A.

5

- 12. Process for producing the thermoplastic elastomer composition according to any one of claims 1-11, wherein the elastomer is dynamically cured by using 0.5 5 parts of phenolic resin based on 100 parts of elastomer.
- Mixture comprising the thermoplastic elastomer composition according to any one of claims 1-11 and a further thermoplastic polymer.